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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/601,078	07/20/2000	Masafumi Koide	Q60201	5578

7590 05/23/2003  
Sughrue Mion Zinn Macpeak & Seas  
2100 Pennsylvania Avenue NW  
Washington, DC 20037-3202

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EXAMINER

MAKI, STEVEN D

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/601,078

Applicant(s)

KOIDE, MASAFUMI

Examiner

Steven D. Maki

Art Unit

1733

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 14 May 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☒ Applicant's reply has overcome the following rejection(s): the 35 USC 112 second paragraph rejection.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see advisory action attachment.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: 10.Claim(s) rejected: 1-9.

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

## advisory action attachment

response to arguments

Applicant comments that the present invention is directed to addressing RCF and RSAT. The examiner adds that Moseley et al is directed to addressing the problem of RSAT. See for example col. 1 lines 27-30 of Moseley et al.

Applicant argues that Moseley et al merely counteracts the RSAT of the tire block surface caused by the turning of the vehicle. The examiner disagrees. Moseley et al discloses using a twisted tread element to address the problem of the tire's residual self aligning torque (RSAT). The twisted tread element generates a net torque when compressed (loaded with radially directed force). The net torque generated by the block reduces the tire's self-aligning torque (these two torques are opposite in direction). As a real world example of the twisted tread element, Moseley et al illustrates a twisted block having a twisted narrow groove. Although Moseley et al does not explain what causes the tire's self-aligning torque, Europe '849 teaches that it is known in the art that the tire belt structure and its cross-ply reinforcing members can cause a residual aligning torque. The reinforcing members in the belt are cords. See Blow. One of ordinary skill in the art would have been highly motivated to use Moseley's solution (use of real world twisted block having twisted narrow groove therein to generate net torque for reducing residual self aligning torque) to solve an existing real world problem (residual self aligning torque caused by cords in belt of pneumatic tire); applicant having presented no convincing argument and/or evidence to the contrary.

Applicant's argument that in the claimed invention the wall configurations are not required to be twisted is not persuasive since (1) none of the claims require the wall configurations to not be twisted (independent claims 1, 2 and 7 are generic to the block being twisted and the block not being twisted) and (2) dependent claim 8 specifically requires "the block-shaped land portion is twisted". Figure 10 of applicant's disclosure illustrates such a twisted block. The twisted block in applicant's figure 10 corresponds to Moseley et al's twisted block shown in figures 12A and 12B.

With respect to the sipe secondary references (e.g. Collette et al and Japan Japan '805), applicant apparently agrees with the examiner that it would have been obvious to form the "narrow grooves" in the block of Moseley as --sipes--.

Applicant argues that Europe '849 discloses a technique in which the RSAT of the tread pattern as a whole is cancelled out by controlling the groove wall angle of the lug grooves of the shoulder blocks on both sides. First: Europe '849's teachings are not so limited since Europe '849 teaches that the centerline draft angles of the lateral grooves 54, 64 are influenced by the construction of the belt plies. See page 9 lines 11-15. Second and more important: Moseley teaches a solution for the RSAT problem and, as evidenced by Europe '849, the belt in a pneumatic tire causes an RSAT problem.

Applicant argues that Moseley teaches twisting a single axis of the tread element instead of two axes of twisting. Applicant is incorrect because Moseley teaches rotating the block top surface relative to the block bottom surface; it being noted that applicant obtains the twisting about two axes by rotating the sipe bottom relative to the sipe top.

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**allowable subject matter**


**Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (the 35 USC 103 rejection of claim 10 in the last office action dated 12-18-02 is withdrawn). As can be seen from figures 12A and 12B, Moseley et al teaches twisting the narrow grooves in the *same* direction (instead of the opposite direction) as the direction of twist for the block.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki  
May 22, 2003

  
STEVEN D. MAKI  
PRIMARY EXAMINER  
~~GROUP 1300~~  
Av 1733 5-22-03